

Att'y Ref. No. 003-122

U.S. App. No.: 10/808,487

1. (Currently Amended) A method for the operation of a power plant with a closed or quasi-closed cycle, the power plant comprising at least one compressor unit or a pump, at least one combustion chamber, and at least one turbine, ~~and at least one heat sink~~, the method comprising:

connecting means for coarse fractionation of air upstream of an air fractionation installation to supply oxygen-enriched air to the air fractionation installation;
obtaining at least one oxygen flow with the air fractionation installation;
reacting a fuel mass flow with said at least one oxygen flow in the at least one combustion chamber to form a hot gas;
expanding said hot gas in a work-performing manner in the at least one turbine to produce excess combustion products; and
removing the excess combustion products from the cycle.

2. (Previously Presented) The method for the operation of a power plant as claimed in claim 1, wherein the air fractionation installation comprises a cryogenic air fractionation installation.

3. (Previously Presented) The method for the operation of a power plant as claimed in claim 1, wherein the means for the coarse fractionation of air comprises an at least single-stage membrane device.

4. (Previously Presented) The method for the operation of a power plant as claimed in claim 1, wherein the means for coarse fractionation of air comprises a vacuum swing adsorption device.

5. (Previously Presented) The method for the operation of a power plant as claimed in claim 1, further comprising:
increasing the oxygen content of air supplied to the air fractionation installation to at least

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40 per cent by volume with the means for coarse fractionation of air.

6. (Previously Presented) The method for the operation of a power plant as claimed in claim 3, wherein a permeated air component for said at least single-stage membrane device is oxygen.

7. (Previously Presented) The method for the operation of a power plant as claimed in claim 3, wherein a permeated air component for said at least single-stage membrane device is nitrogen.

8. (Previously Presented) The method for the operation of a power plant as claimed in claim 3, wherein the power plant includes a waste heat utilizer of the gas turbine, and further comprising:
providing heat for said at least single-stage membrane device from the waste heat utilizer.

9. (Previously Presented) The method for the operation of a power plant as claimed in claim 3, further comprising:
providing refrigeration required for said at least single-stage membrane device from the air fractionation installation.

10. (Previously Presented) The method for the operation of a power plant as claimed in claim 1, wherein said excess combustion products comprise CO₂, H₂O, or both.